Lessons From the Practice

Desperately Seeking Primary Prevention

EDITOR'S NOTE: *To protect the privacy of the patient, the names and the location of the patient and the physician who wrote the Lesson will remain anonymous. No reprints are available.*

Christina came to see me on a Friday, 30 minutes before the office was to close. She was the last patient of the week.

She appeared pale, serious, and quiet. "I stuck myself with a needle. The patient had AIDS [acquired immunodeficiency syndrome]. He died this morning."

When did this happen?

"Last night, around midnight."

Have you seen anyone yet?

"No. I couldn't believe it had happened. I was busy taking care of the patient, who was really sick. When I finished my shift, I was exhausted, and I went home."

Christina and I discussed what had happened and why. As has become sadly routine, I gave her statistics: "Since the patient had AIDS, you have a 1-in-200 chance of becoming infected with HIV [human immunodeficiency virus]. Probably much less, since this was such a minor stick." And the protocol. "We should draw a baseline blood test for the virus and recheck at six weeks, three months, and six months."

She had completed her hepatitis B vaccination four months previously, and blood tests had revealed that she was now immune to hepatitis B, so this was not a concern. She had received tetanus toxoid two years previously after a needle-stick accident, so this was up to date.

We discussed the possibility of starting a regimen of zidovudine, or AZT, which sometimes is used in cases like this, although the benefit is unproven. Would she consider its use?

"No," she said. She had taken care of patients who received AZT and didn't care for its side effects. Christina was certain that she would not take AZT and that she would have been seen even sooner if she had been willing to do so.

We reviewed the confidential system of testing and her need for safe sexual practices. I provided routine postexposure counseling.

"If you are anxious or have any problem in the coming weeks, call me."

In our Employee Health Center, we see 10 to 15 employees with needle-stick injuries every month. I always feel concerned about these accidents, especially when the source is HIV-positive; I felt particularly concerned about Christina. Maybe it was because the patient who had AIDS was so sick and had died the next day. That weekend, Christina was very much on my mind.

Ten days later she called. "I have a sore throat and feel achy all over. I'm nauseous, too. Probably just the flu, right?"

It *was* flu season. "Chances are, yes," I said. She called back two days later.

"I'm having fevers to 102°, chills, and vomiting. I feel like I was hit by a truck. I have no appetite and can't sleep, and my glands are swollen. I'm really feeling scared." The baseline HIV test from her previous visit had returned "nonreactive," or negative. She came in to see me that day, and her examination was normal, including a complete blood cell count. She seemed reassured. Three days later, when she continued to have fevers, malaise, and achiness, she returned to see me. We repeated the HIV test.

I felt worried and wondered if I should have insisted on her taking AZT. I did not share my deep concerns with my patient, whose chances of contracting an infection from her exposure were so small.

A week later Christina was feeling better. Her repeat HIV test was returned "nonreactive." We spoke by phone. "I think it was the flu," she said. "It took a week for me to begin to feel better."

Three weeks later, again on a Friday afternoon, the nurse practitioner asked me into her office. "Look at this," she said.

She showed me a laboratory result, encoded with a number instead of a name, as is done in the Employee Health Center to ensure confidentiality with employee HIV results. I decoded the sample. The number belonged to Christina—her six-week routine follow-up blood test for HIV antibodies was positive. She was infected.

Unbelievable. I shook my head. Couldn't be. I cried, knowing it was probably true. I would repeat the test. But inside I knew that her fevers had been part of her acute retroviral illness and that she had seroconverted. How would I possibly be able to tell her? How would she manage? I kept shaking my head, wanting to change what had happened.

Again, all weekend I thought about Christina. Saturday night I dreamed of AIDS-infected needles piercing my legs.

I wanted to talk with Christina at a time when support services would be available, so Monday morning I called her at home. "I'd like to see you." She didn't ask why. Now, concern and fear registered in her voice. She came sharply at noon and brought along a close friend.

Her first reaction was profound sadness. "I had a feeling about this. This never should have happened," she said as she cried.

How many times has Christina gone over every moment of that night when she cared for that unnamed patient—and that one horrible moment when the needle stuck her left index finger? Such a tiny stick; she hardly felt it. But enough virus at the tip of that needle to infect her. Change her life. Puncture it. Her life forever altered by the tiny segment of protein now encoded in her cells.

The needle had been used by an intern to obtain blood for blood gas values and was left on the patient's bedstand, hid-

(Desperately seeking primary prevention. West J Med 1991 Sep; 155:310-311)

den from view. He was busy and didn't see the needle from his unsuccessful stick left enclosed between two Betadine-soaked gauze pads. Neither did Christina, as she was cleaning up. "I'm really sorry," he had said when he saw her get stuck. The intern still does not know the consequences of that moment of unintended carelessness. He has moved on to residency elsewhere. He cannot be told what happened without risking Christina's confidentiality.

The burden of secrecy weighed heavily on me. I felt like announcing to the entire medical center what had happened. I wanted to tell of the dangers. We must prevent such incidents from happening! But the need to protect Christina's identity prevented me. I identify with her, and her own burden, and at times feel incredible, undirected anger.

This has been a most difficult year for Christina. Last week she said to me, "I feel devastated. It's not getting easier."

I feel privileged to know Christina and admire her strength and courage. I wonder how one deals with an experience wrought with such fear. It will continue to affect her life. For the present, we continue to work together on preventing and following up on needle-stick exposures in our medical center.

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"Lessons From the Practice" presents a personal experience of practicing physicians, residents, and medical students that made a lasting impression on the author. These pieces will speak to the art of medicine and to the primary goals of medical practice—to heal and to care for others. Physicians interested in contributing to the series are encouraged to submit their "lessons" to the series' editors.

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